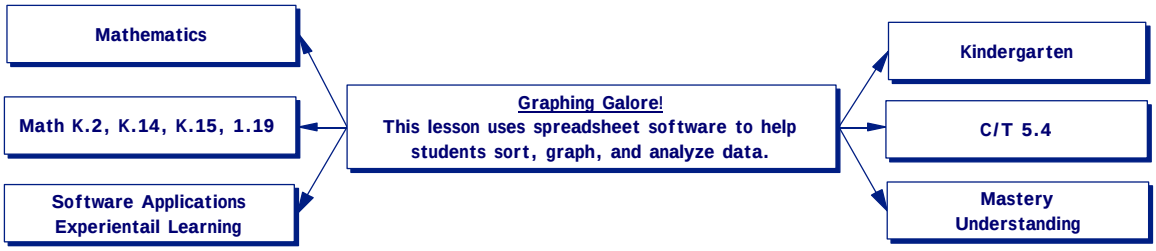

Graphing Galore!

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Curriculum Area	Mathematics
Subject Area	Data Collection/Graphing
Grade Level	Kindergarten
Learning Objectives	• The student will be able to sort and count given objects. • The student will be able to apply information to a graph on a worksheet and/or computer. • The student will be able to describe and analyze the results.
Correlation to the SOL	Math K.2, K.14. K.15, l.19 C/T 5.4
Video/Technology Hardware/Software Needed	**For class:** Computer connected with printer, if possible Computer Projection System Spreadsheet software (such as *Microsoft Excel*, *ClarisWorks, Tom Snyder Graph Club*, or any other program that would allow you to draw or create a graph) **For each student:** Computer attached to a printer, if possible Spreadsheet software (such as *Microsoft Excel*, *ClarisWorks, Tom Snyder Graph Club*, or any other program that would allow you to draw or create a graph)
Materials Required	**For class:** Teacher-created graph template **For each student:** Worksheet of graph **Other:** Materials to be counted: Skittles, M & Ms, Fruit Loops cereal, Gummy Bears, Lucky Charms cereal (for St. Patrick's Day), dinosaurs, animal cookies, beans, or any other sorting materials.

Procedures/Activities	1. Review different attributes of sorting. Discuss best way to sort given objects for this lesson. 2. Do a sample sort as a whole group. Then enter the information into the spreadsheet software that allows for graphs. Use the teacher-created graph template and the Computer Projection System for whole class instruction. 3. Explain to the students the steps for filling graph cells with paint to represent given amounts of different objects. 4. Have the students take turns filling the cells by dragging and clicking the paint in various cells. 5. Discuss what the graph shows about the objects. 6. After completing this activity as a whole class, pass out baggies of sorting objects and a worksheet for each student. Have them complete the worksheet independently. 7. Have each student apply information from their worksheet to the computer graph and print (optional).
Content Assessment	Teacher will observe and evaluate students based on the following questions: Were the students able to sort by a common attribute? Were the students able to count items and apply results to a graph? Were the students able to interpret the graph?
Technology Integration Assessment	Teacher will observe and evaluate students based on the following questions: Were the students able to drag, click, and fill the cell with paint in the graph? Were the students able to transfer knowledge from paper to computer successfully?
Extensions	**Math:** • Have the students brainstorm other objects to graph, help create a graph, and possibly insert clip art as headings. • ITV math series *Math Monsters: 101- Data Collection* ties in nicely with this. **English:** • Read *The Gingerbread Boy* or *Hansel and Gretel* and graph skittles or M & M's as candy decorations for the gingerbread boy. • Read a dinosaur book and discuss types of dinosaurs. Then graph gummy or cookie dinosaurs. • Read one of many books on Teddy Bears and then graph Gummy Bears by colors. A Teddy Bear Picnic! • Read *Farm Concert* or any other farm related book and graph farm animals (either plastic or cookie). **Science:** • Read a book about animals in winter and then discuss feeding the birds. Have students graph the colors in Fruit Loops cereal and when completed, have them make a feeder by stringing the cereal through yarn. Could take it a step further and have them create a pattern with the cereal. **Physical Education:** • Sort students by physical attributes (i.e., hair or eye color, types of shoes worn, jacket, coats, or sweaters worn) and then graph class. **Music:** • Sing and move to such songs as: “Parade of Colors,” “Triangles, Circles and Squares,” or other songs that lend themselves to various shapes or colors. **Art:** • After sorting zoo animal cookies, have the students draw a layout of a zoo placing their correct number of cookies in a cage according to their graph.